

CLAIMS

1. A variable displacement swash plate type
5 compressor, wherein a swash plate is coupled to a drive shaft
to be rotatable integrally with the drive shaft, pistons are
coupled to the swash plate via shoes, rotation of the drive
shaft rotates the swash plate, which causes the pistons to
reciprocate and compress gas, and the displacement is changed
10 by varying the inclination angle of the swash plate, the
compressor being **characterized by:**

an inclined surface provided at part of the entire outer
circumferential edge portion of the swash plate.

15 2. The compressor according to claim 1, **characterized
in that** part of the outer circumferential edge portion of the
swash plate corresponding to the piston located at the top
dead center position is provided with the inclined surface on
a salient corner opposite to the piston.

20 3. The compressor according to claim 1 or 2,
characterized in that part of the outer circumferential edge
portion of the swash plate corresponding to the piston
located at the bottom dead center position is provided with
25 the inclined surface on a salient corner toward the piston.

4. The compressor according to any one of claims 1 to
3, **characterized in that** the swash plate includes a first
swash plate, which is coupled to the drive shaft to be
30 rotatable integrally with the drive shaft, and a second swash
plate supported by the first swash plate, the pistons are
coupled to the first and second swash plates via first shoes,
which abut against the first swash plate, and second shoes,
which abut against the second swash plate and receive a
35 reaction force of compression, and part of the outer

circumferential edge of the first swash plate corresponding to the piston located at the top dead center position is provided with the inclined surface on a salient corner opposite to the second swash plate.

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5. The compressor according to claim 4, **characterized in that** part of the outer circumferential edge portion of the first swash plate corresponding to the piston located at the bottom dead center position is provided with the inclined surface on a salient corner toward the second swash plate.

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6. The compressor according to any one of claims 1 to 5, **characterized in that** the gas is refrigerant used in a refrigeration circuit, and carbon dioxide is used as the refrigerant.

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